

# AWS Tutorial: Automating Application Integration Services

This AWS automation tutorial covers how to automate complex relationships with AWS tools and services that connect applications and systems automatically. This course on automating application integration services shows you what tools and services AWS has for simplifying the development of cloud applications and provides practical guidance on how to utilize them effectively.

[CBT Nuggets course material](#) →

## WEEK 1

### Getting Started with Amazon Managed Workflows for Apache Airflow (MWAA) 56min.

Introduction to Amazon Managed Workflow for Apache Airflow (MWAA)	10
Configure Amazon S3 for MWAA	8
Create VPC for Amazon MWAA	12
Deploy Amazon MWAA Environment	8
Overview of Apache Airflow Web User Interface	8
Understanding Amazon MWAA REST APIs	5

### Automate AWS Dev Lab Deployment During Business Hours

Overview	1
Intro to AWS Dev Lab Automation	15
Create AWS CloudFormation Template in S3 Bucket	8
Create AWS Step Function to Deploy CloudFormation Stack	13
Add Wait and DeleteStack States to AWS Step Function	8
Schedule Dev Lab Deployment with Amazon EventBridge	12

### Automate Amazon Simple Notification Service (SNS) with PowerShell

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Getting Started with PowerShell and Amazon SNS	10
Setting Up Your AWS PowerShell Development Environment	10
Exploring the Amazon SNS PowerShell Commands	6
Create an Amazon SNS Topic with PowerShell	11
Create an SNS Topic using PowerShell and AWS CloudFormation	8

**WEEK 2****155 min.**

Send a Message to an SNS Topic with PowerShell	7
Clean up CloudFormation Stacks and SNS Topics	5

**Managing Amazon Simple Queueing Service (SQS) with PowerShell**

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Configure Development Environment for Amazon SQS Automation	10
Exploring the Amazon SQS Commands in PowerShell	9
Create an Amazon SQS Queue with AWS Tools for PowerShell	13
Discover Amazon SQS Queue Attributes with PowerShell	8
Configure Amazon SQS Queue Attributes with PowerShell	5
Send a Message to an Amazon SQS Queue with PowerShell	10
Receive Messages from Amazon SQS with PowerShell	8

**Managing Amazon Simple Queueing Service (SQS) with Python and Boto3**

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Introduction to Amazon SQS and Python Boto3	12
Configure Amazon EC2 Development Environment for Python Boto3	13
Create Amazon SQS Queues with Python Boto3	13
Configure Amazon SQS Queue Attributes with Python Boto3	14
Send Messages to Amazon SQS with Python Boto3	11

**WEEK 3****20 min.**

Process Messages from Amazon SQS Queues with Python Boto3	11
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**Design AWS Step Functions Using Workflow Studio**

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Intro to AWS Step Functions and Workflow Studio	1
Invoke an AWS Lambda Function from Workflow Studio	1
Implement Lambda Function and Update IAM Permissions	1
Handling Errors in Step Functions with Workflow Studio	1
Run Multiple States in Parallel using Workflow Studio	1
Query DynamoDB Data from Workflow Studio	1